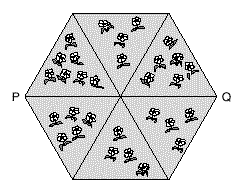
**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ PreAlgebra Period\_\_\_\_\_\_**

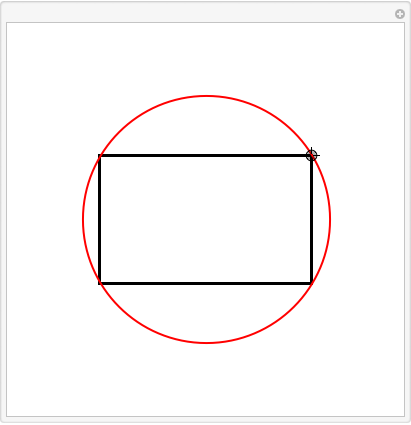
**The following problems are due Monday, November 10th. You may use any resource to solve these problems except if that resource is a person. You have been previously taught these standards. On Thursday of this week I will set aside 5 minutes to help you with any questions you may have in solving these problems. YOU MUST SHOW ALL WORK!**

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| 1.) A garden shaped like a regular hexagon has 3 walkways that divide the garden into 6 triangles. All the triangles formed by the walkways are congruent and equilateral. |
| If the distance from point P to point Q is 15 meters, what is the perimeter of the garden? |



2.) The average (arithmetic mean) of a particular set of six numbers is 14. When one of the numbers is replaced by the number 13, the average of the set increases to 16. What is the number that was replaced?

3.) A 3 by 4 rectangle is inscribed in circle. What is the circumference of the circle?



4.) Pat's collection contains US, Indian and British stamps. If the ratio of US to Indian stamps is 5 to 2 and the ratio of Indian to British stamps is 6 to 1, what is the ratio of US to British stamps?

5.) If 31 is the average (arithmetic mean) of *x, x,* 3, 17, 19 then *x* =

6.) A mechanic can install carburetors in 3 cars every 5 hours. At that rate, how long will it take the mechanic to install carburetors in 7 cars.

7.) In the figure below, the large rectangle is divided into six identical small squares. If the perimeter of the large rectangle is 60, what is the perimeter of one of the small squares?

